Applicants: Benjamin N. Peace, et al. Attorney's Docket No.: 17638-004US1
Serial No.: 10/509,441 Client Ref. No.: INTUP2782IUS

Serial No.: 10/509,441 Filed: April 22, 2005

Page : 2 of 11

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (Currently Amended) A fuel cell compression assembly, comprising:

a carriage unit having at least two opposing side walls maintained in spaced relation by a

base member extending between the at least two opposing side walls; at a lower position on the

at least two opposing side walls,

wherein the at least two opposing side walls and the base member define a cradle for

receiving fuel cell plates, and wherein the at least two opposing side walls each includes at least

one engagement member engagement members on an internal face for engaging with a top

member comprising a top of the carriage unit, the base member being below the engagement

members;

wherein the engagement members comprise corresponding engagement members spaced

at intervals down the at least two opposing side walls;

wherein the engagement members each comprise teeth projecting inwardly towards an

internal volume of the carriage unit; and

wherein at least one of the teeth has an asymmetric profile allowing passage of the top

member in a first direction but not in a second direction that is opposite to the first direction.

2 to 4. (Cancelled)

Applicants: Benjamin N. Peace, et al.

Serial No.: 10/509,441 Filed: April 22, 2005

Page : 3 of 11

5. (Currently Amended) The fuel cell compression assembly of claim 1, wherein the the

Attorney's Docket No.: 17638-004US1

Client Ref. No.: INTU/P27821US

at least two opposing side walls are formed of a material having sufficient resilience to allow a

top member to be engaged with the carriage unit by passage over, and temporary displacement

of, an engagement member.

6. (Currently Amended) The fuel cell compression assembly of claim 1 2, wherein the

engagement members comprise parallel ribs extending teeth extend along a substantial lateral

extent of the at least two opposing side walls.

7. (Currently Amended) The fuel cell compression assembly of claim 1 6, wherein each

of the parallel ribs teeth has an asymmetric profile allowing passage of the top member thereover

in a first direction but not in a second direction opposite to the first direction.

8. (Currently Amended) The fuel cell compression assembly of claim 7, wherein each of

the parallel ribs teeth has a profile allowing disengagement of the top member in a direction

parallel to axes of the teeth parallel ribs.

9. (Previously Presented) The fuel cell compression assembly of claim 1, wherein each

of the at least two opposing side walls includes ventilation apertures.

Applicants: Benjamin N. Peace, et al.

Attorney's Docket No.: 17638-004US1
Serial No.: 10/509,441

Attorney's Docket No.: INTU/P2782IUS

Serial No.: 10/509,441 Filed: April 22, 2005

Page : 4 of 11

10. (Currently Amended) The fuel cell compression assembly of claim $\underline{1}$ [[4]], wherein

the \underline{a} direction of engagement of the top member relative to the at least two opposing side walls

is perpendicular to a plane of the base member.

11. (Previously Presented) The fuel cell compression assembly of claim 1, wherein the

top member comprises at least two corresponding engagement members for engaging with each

of the engagement members on respective side walls of the carriage unit.

12. (Previously Presented) The fuel cell compression assembly of claim 1, wherein each

engagement member is situated in a recess of a side wall.

13. (Previously Presented) The fuel cell compression assembly of claim 12, wherein the

top member is adapted to be received into one or more recesses in the at least two opposing side

walls.

14. (Previously Presented) The fuel cell compression assembly of claim 1, wherein the

carriage unit comprises aluminium.

15. (Previously Presented) The fuel compression assembly of claim 1, wherein the base

member and/or the top member comprise a box-section aluminum extrusion.

Applicants: Benjamin N. Peace, et al. Attorney's Docket No.: 17638-004US1 Client Ref. No.: INTU/P27821US

Serial No.: 10/509,441 Filed : April 22, 2005

Page : 5 of 11

16. (Currently Amended) The fuel compression assembly of claim 1, further comprising

location features on externals external walls of the fuel compression assembly, the location

features for provision of fuel tanks or other system hardware.

17. (Currently Amended) A fuel compression assembly, comprising:

a carriage unit cradle for receiving a stack of fuel cell plates and for maintaining at least

some of the fuel cell plates substantially overlapped; and

a closure member adapted to close a carriage unit containing the carriage unit cradle and

to apply pressure to the fuel cell plates via automatic locking engagement with the carriage unit

cradle when the closure member is brought into position with the carriage unit cradle in a first

direction that is substantially orthogonal to a plane of the fuel cell plates.

18. (Previously Presented) The fuel cell compression assembly of claim 17, wherein the

carriage unit cradle and the closure member comprise interlocking teeth that inhibit return of the

closure member in a second direction opposite to the first direction.

19. (Previously Presented) The fuel cell compression assembly of claim 18, wherein the

interlocking teeth provide a plurality of automatic locking positions at varying distances along

the first direction.

20. (Currently Amended) A method of forming a fuel cell stack, comprising:

Applicants: Benjamin N. Peace, et al.

Attorney's Docket No.: 17638-004US1

Serial No.: 10/509,441

Attorney's Docket No.: INTU/P2782IUS

Serial No.: 10/509,441 Filed: April 22, 2005

Page : 6 of 11

receiving a plurality of fuel cell plates in a confinement volume of a carriage unit cradle,

the fuel cell plates forming a stack;

applying a carriage unit closure member to compress the fuel cell plates in a first

direction substantially orthogonal to a plane of the fuel cell plates and to engage the closure

member with the carriage unit cradle; and

automatically locking the closure member and the cradle when the closure member

reaches a predefined degree of compression of the fuel cell plates.

21. (Previously Presented) The method of claim 20, further comprising passing through

a series of successive automatic locking engagement positions between the closure member and

the carriage unit cradle which are intermediate to a starting position and a final position at which

the closure member has reached an appropriate degree of compression of the fuel cell plates.

22 and 23. (Cancelled)